

Summary of oral evidence given at Issue Specific Hearing 4 by AJ Barker BSc FRICS Councillor Greatford Parish Council

Specifically I will concentrate on Mallard Pass (MP) outline surface water strategy (OSWS) as amended REP 5 053 Section 3 pages 13 -21

By their own calculation MP estimate that surface mounted PV arrays extending to 4630000m² in a 6 hour storm will increase surface water run off by 14147 litres per second or a 256% increase from the current base line ie current circumstances . Extrapolating this out an additional 305 million litres of surface water would be discharged into the West Glen River in a short period of time inevitably increasing river levels & the risk of flooding in Greatford

But no according to MP this can be reduced to a 0% increase by 4 measures;

1As shown at plate 7 MP is intending to leave gaps between the frame

mounted panels rather than a single drip line at the lowest end. Their reasoning seems to rely upon a report by Cooke & McEwan which in summary states ' solar panels do not have a significant effect on run off volumes or peak flows however where ground beneath panels is bare there may be an increase. MP however make no reference to the conclusion in this report which states that in certain circumstances the peak discharge could be in excess of 100% which of course would be a major problem!

2 MP are relying upon clay soils across the site not being compacted during the construction period & that grass can be established both under & between panels. This is referenced in Natural England's technical information note 101 which says ' the key to avoiding increased run off & soil into water courses is to maintain soil permeability & vegetative cover . Permeable land surfaces underneath & between panels should be able to absorb rainfall as long as they are not compacted & there is vegetation to bind the soil surface 'MP are not giving any commitment to establishing grassland well in advance of construction starting on site. The final paragraph on page 16 'as such the area under the drip line should be seeded with a suitable grass mix as shown on plate 9 to prevent riling(incisions in soil caused by concentrated water flow & an increase in surface water run off rates). It is clear there is a real risk that mature grass land will not be established prior to construction to absorb surface water run off.

3 MP suggest that the panels will be located on flat topography . This is not true for the whole site where there are significant slopes down into

the West Glen river therefore inevitably increasing surface water run off.

4 MP propose a 6m buffer zone from all watercourses which they allege will absorb surface water run off & slow this down before entering the watercourse. How established will this be ? MP have relied upon a model study area on the south side of the West Glen river near Banthorpe . We estimate the study area to be only 4.5 hectares & not reflective of the whole site. Why has the study not been for the whole site . Perhaps MP were concerned at what the results would have shown?

5 MP have suggested that additional attenuation could be considered as referred to in the OSMP by the introduction of swales & scrapes to collect water run off. No detail of what is proposed has been provided.

In my opinion the attenuation measures proposed by the developer are an absolute minimum to reduce costs leaving residents downstream of the scheme at greater risk. This risk was clearly identified by Rutland County Council REP2 048 ' it is considered that the proposals would have a negative impact on surface water drainage across the whole site & the development could pose a flood risk' I have no doubt this is correct.

Further Additional Comments

MPs solicitor stated that the Environment Agency had not raised any issues with flood risk. As I pointed the Environment Agency do not deal with surface water run off issues which is the LLFAs responsibility See Rutland County Councils comments above.

MPs solicitor confirmed that the developer will not give any commitment to establishing grassland prior to construction starting on site. Obviously profit comes before reducing flood risk.

In the unfortunate event that consent were recommended then a more comprehensive surface water run off attenuation scheme would be needed for example lagoons or defences on the West Glen